package assignment20;

import java.util.Scanner;

import java.util.Random;

public class Assignment20 {

public static void main(String[] args) {

int elemCount;

int i;

int searchValue;

int location = -1;

Scanner sc = new Scanner(System.in);

Random ran = new Random();

// step 1: Ask how many elements

System.out.print("How many elements?");

elemCount = sc.nextInt();

// Step2 Create the array

int[] array = new int[elemCount];

// Step3: Put the random numbers in the array

for (i=0; i<elemCount; i++) {

array[i] = ran.nextInt(1000);

}

// Step4: Display the array to the user

System.out.println("Random number are:");

for (i=0; i<elemCount; i++) {

System.out.println((i+1) + ": " + array[i]);

}

System.out.println("");

// Step5: Ask for the number to search

System.out.println("Which number to search?");

searchValue = sc.nextInt();

// Step6: Search that value

for (i=0; i<elemCount; i++) {

if (searchValue == array[i]) {

location = i+1;

}

}

// Step7: Display the search result

if (location == -1) {

System.out.println("Value was not found");

} else {

System.out.println("Value found at index: " + location);

}

System.out.println("");

System.out.println("End of this assignment");

}

}